**Amendments To Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**In the Claims:**

1. (Currently Amended) A process for continuously processing discrete portions of a porous material in a CVI furnace having a CVI chamber, said process comprising:

placing said discrete portions of said porous material into a plurality of individual modules such that one discrete portion of said porous material is enclosed by a respective one of said individual modules,

continuously loading the individual modules containing said porous material into said CVI chamber,

introducing a reactant gas into said CVI chamber while heating said porous material with a heater plate located proximate to said porous material to densify said porous material,

wherein each individual module comprises a gas inlet and a gas outlet.

2. (Canceled)

3. (Previously Presented) A process according to claim 1, further comprising removing said porous material from said CVI chamber and cooling down said porous material.

4. (Original) A process according to claim 1, wherein said heater plate is located above said module.

5. (Original) A process according to claim 1, wherein said heater plate is located below said module.

6. (Original) A process according to claim 4, wherein said CVI chamber includes an additional heater plate located below said module.

7. (Original) A process according to claim 1, wherein said gas flow is reversed during said process.

8. (Currently Amended) A process according to claim 1, wherein said reactant gas comprises at least one of natural gas and a mixture of methane and propane.

9. (Currently Amended) A process according to claim 1, ~~wherein said reactant gas comprises a mixture of methane and propane~~ wherein each individual module comprises a top gas chamber, a central chamber, and a bottom gas chamber.

10. (Original) A process according to claim 9, wherein said mixture comprises about 92.5% methane and about 7.5% propane.

11. (Currently Amended) A process for continuously processing discrete portions of a porous material in a CVI furnace having a CVI chamber which is maintained at a desired temperature, pressure and flow rate comprising

placing said discrete portions of said porous material into multiple individual modules such that one discrete portion of said porous material is enclosed by a respective one of said individual modules, wherein each individual module comprises a gas inlet and a gas outlet,

continuously loading the individual modules containing the porous material into said CVI chamber,

introducing a ~~reactant gas~~ mixture of methane and propane into said CVI chamber while heating said porous material with a heater plate located proximate to said porous material to densify said porous material.

12. (Canceled)

13. (Previously Presented) A process according to claim 11, further comprising removing said porous material from said CVI chamber and cooling down said porous material.

14. (Original) A process according to claim 11, wherein said heater plate is located above said module.

15. (Original) A process according to claim 11, wherein said heater plate is located below said module.

16. (Original) A process according to claim 14, wherein said CVI chamber includes an additional heater plate located below said module.

17. (Original) A process according to claim 11, wherein said gas flow is reversed during said process.

18. (Original) A process according to claim 11, wherein said gas comprises natural gas.

19. (Canceled)

20. (Original) A process according to claim 19, wherein said mixture comprises about 92.5% methane and about 7.5% propane.

21. (Original) A process according to claim 11, wherein said temperature is maintained in the range of about 1700 to about 2500.degree. F.

22. (Original) A process according to claim 11, wherein said pressure is maintained in the range of about 50 to about 760 torr.

23. (Currently Amended) A process for continuously processing multiple layers of discrete portions of a porous material in CVI furnace having a CVI chamber which is maintained at desired process conditions comprising

placing ~~said layers of~~ said discrete portions of said porous material into a plurality of individual modules such that one discrete portion of said porous material

is enclosed by a respective one of said individual modules, wherein each individual module comprises a gas inlet and a gas outlet,

continuously loading the individual modules containing the layers of porous material into said CVI chamber,

introducing a reactant gas into said CVI chamber while heating said porous material with a heater plate located proximate to said porous material to densify said porous material.

24. (Canceled)

25. (Original) A process according to claim 23, wherein said reactant gas flow is reversed during said process.

26. (Currently Amended) A process for processing discrete portions of a porous material in CVI furnace having a CVI chamber which is maintained at desired process conditions comprising

placing said discrete portions of said porous material into a plurality of individual modules such that one discrete portion of said porous material is enclosed by a respective one of said individual modules, wherein each individual module comprises a gas inlet and a gas outlet,

continuously loading the individual modules into said CVI chamber,

introducing a reactant gas into said CVI chamber while heating said the porous material in each module with a heater plate located proximate said porous material to densify said porous material, and wherein said reactant gas flow is reversed during the process.

27. (Original) A process according to claim 26, wherein said heater plate is above the module.

28. (Original) A process according to claim 26, wherein said CVI chamber includes an additional heater plate below said module.

29-41. (Canceled)

42. (Original) A process according to claim 8, wherein ethane and propane is added to the natural gas.

43. (Original) A process according to claim 18, wherein ethane and propane is added to the natural gas.

44. (Original) A process according to claim 26, wherein the heater plate has a first thickness at its center and a second thickness at its periphery whereby the second thickness is larger than the first thickness.

45. (Currently Amended) A process for processing discrete portions of said porous material in a conventional CVI furnace having a CVI chamber which is maintained at desired process conditions comprising

placing said discrete portions of said porous material into one of a plurality of individual modules such that one discrete portion of said porous material is enclosed within a respective one of said individual modules, wherein each individual module comprises a gas inlet and a gas outlet,

continuously loading the individual modules into said CVI chamber, preheating a reactant gas,

introducing said reactant gas into said CVI chamber while heating said porous material in each module with a heater plate located proximate said porous material to densify said porous material, wherein the heater plate has a first thickness at its center and a second thickness at its periphery whereby the second thickness is larger than the first thickness.

46-47. (Canceled)